NEWS FROM THE PRESIDENT

Atari was in full force at the recent Comdex in Las Vegas showing a new line of products. The most impressive demo I saw had to be the graphic workstation which allowed you to display 521 by 480 pixels with as many as 1 million shades of color. The only problem is that it required a 4-meg Atari ST to handle the I/O! They also showed the CD ROM player which can be used on the ST for mass storage. There were no less than four IBM clones being offered by Atari which will be shipping shortly next year. Multiuser and Networking were also big topics to the serious business side of the ST. The exhibit also had third party support such as Data Pacific, Timeworks, and Michtron to name a few. From what I saw, Atari is in full gear for another year of products and software.

RUDY....

EDITORS COLUMN

Well, this the first newsletter that I have attempted to put together as the new editor of the Exchange. I hope you will enjoy it.

If you see any mistakes or have any suggestions on making the newsletter better, let me know. After all, this is my first time....

I am hoping to write some informative and interesting articles that will help you with your' ST or just something that will make you laugh.

I am also hoping to give a demo on the new translator by Data Pacific if it ever comes in. I'm still waiting for it to arrive like the rest of you who ordered them.

Oh yea, by the way, don't forget that the meeting for November was moved up one week due to Thanksgiving. The new date is November 19th at 7:00 P.M.

Also, remember that the newsletter will have a classified section too.

If any of you want to submit articles, let me know and I will set some space aside for you.

Hope you enjoy,   Mike D.

THE HELP LIST

These are the names and phone numbers of some of our members who have offered to help out other members with programs they use most.........

Richard Maldonado-275-1492

Uses alot of different programs and is willing to help with even minor problems..
DB Master One
Dac Easy Accounting
Base Two
Publishing Partner
Solopak Utilities
Degas elite
NeoChrome
Mickey Obermire-486-3726

Mainly interested in spreadsheet programs....
A Calc - Swift Calc
Gerald Storvik-229-9827
ST Basic - GFA Basic
Mike Thomas-298-4767
Will help with Word Writer ST...........

Thanks Guys..........

ST CLUB OFFICERS

PRESIDENT	RUDY LUNA	224-3921
VICE PRESIDENT	GREG VAUGHN	NO PHONE
TREASURER	RICHARD MALDONADO	275-1492
DISK LIBRARIAN	MIKE PENNER	299-3334
NEWSLETTER EDITOR	MIKE DE MONCH	224-7026

BOARD MEMBERS:

GERALD STORVICK	229-9827	MICKEY OBERMIR	486-3726
JOHN PEDERSON	251-0878	STAN HALPIN	229-4781
GREG PYLES	224-2931		

The Fresno ST Users Group is an independent, non-profit club with no connections with Atari, Inc. Membership dues are $24 a year. Membership includes access to the public domain disk library, a subscription to the monthly newsletter, free use of the club book library, free access to the club BBS, and classes when held. Permission to reprint articles in any non-commercial publication is permitted without written authorization, provided that proper credit is given to the Fresno ST Users Group and the author. Opinions expressed within this newsletter do not neccesarily represent the views of the Fresno ST Users Group.

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By the second Saturday of the month

ROBOTICS FOR THE ST.

Although this article is mostly aimed at those of you who teach on the ST computer (such as at McLane, Edison, etc.), the capabilities of the following are amazing for any ST enthusiast who wishes to become involved in the world of robots!!

Fischertechnik has recently released a series of computing construction kits for several computers, among them, the Atari ST. The reason this new product really caught my eye was the impressive experiments illustrated in Fischertechnik's colorful 16 page catalog. Examples!!!!!: (quotes takes from under illustrated photograph in catalog - you've really have to see pictures of these robots, they are very nicely constructed and appearantly have much to teach us non-robot orientated people. The following are all experiments contained within the "Experimental" kit):

THE COMPUTER EYE - "A photoresister is hidden behing the shield of the receiver and converts brightness into a suitable input quantity for the computer."

THERMOMETER AND TEMPERATURE CONTROL - "A hot conductor reacts to the ambient temperature by changing its electrical resistance. In this way a thermometer can be set up with a display representation."

THE WELDING ROBOT - "The welding robot can swing its arm in stages of 9 degrees. The arm advancing is controlled by a second motor. The welding tongs are operated via a third output on the interface."

THE TURTLE (software only) - "Puts the basic concept of a mobile robot into effect. The turtle, which is easy to program and yet effecient, has proven its ability for a long time. LOGO and some "Turtle Graphics" extensions (e.g. UCSD-PASCAL) use it. The turtle from Fischertechnik even has sence organs. Computer controlled, it explores its envirnment using artificial intelligence." (The following are experiments within the "Construction Kit"):

TOOL MACHINE - "This program brings in movement. Two motor movements at once must be adjusted to one another. On reaching their respective required positions both movements cause input signals to be given which are monitored by the program."

ANTENNA ROTATOR - "Fine adjustment and positioning can be studied using the aerial-rotor model. The key to this is the potentiometers that are connected to the interface's analog inputs."

TOWER OF HANOI - "The first robot in the fischertech computing construction kit. It be controlled when the construction is turned and the grippingarm is lifted. This robot is used for the "Tower of Hanoi" problem: it reacts.

TEACH-IN ROBOT - "A different biaxial robot that is controlled by means of a programming system that can be used universally."

GRAPHICS TABLET - "The graphics tablet serves the purpose of transferring an original to the computer's display storage." (much the same way drafters have a drawing tablet for their CAD/CAM programs probably)

PLOTTER - "A simple plotter model with which computer graphics can be put on paper."

Fischertecknik also offers the "Training Robot" kit. This whole experiment is a single fascinating robot with includes "3 S-motors, 6.8 volts, - for moving the 3 robot axes, 1 mini-motor, 6.8 volts - for driving the gripping hand, 3 infrared fork light barriers for positioning the three robot axes, 4 scanners for defining the normal position, 4 lamps for indicating operation

visually," and many other things. The features of the "Training Robot" include a "Gripping Hand", which has a symetrical spindal drive, so that the gripping jaws are always held parrellel. Also featured is a Fork Light Barrier," which records the robots' movements, done so by a segment wheel being penetrated by rays of infrared light. Also included in this kit are several peices of software which (as far as I can see) control the robot.

The last kit offered by Fischertechnik is the "Plotter/Scanner," which is composed of 2 bipolar stepping motors with a 7.5 degree steeping angle (6.8 volts), electromagnetic print head, read head with a lamp and a photoresister, 2 scanners for recognizing the end positions, and many other accessories. Of course, the Plotter has a print head which is positioned with a precision of 0.5mm. Also included is a read head so that the printer can read

from the paper as well as print to it. The software included allows the user to control the plotter, use the plotter to be used as a scanner which (through another program) can be used with color. Of course, as with all computers, you will need to

also purchase the interface in order to use all the kits. For the Atari ST, Art. No. 30 566. The interface includes 4 outputs for connecting motors, lamps, electron magnets etc., 8 outputs for digital signals and 2 outputs for analog signals. Also needed is a power supply which Fischertechnik also offers. For the "Experimental" and "Computing" kits, you can use the 6-10 Volt,1A. For the "Training Robot," you will need a 6-10 volt,1.5A. For the "Plotter/Scanner" you'll need a 6-10 volt, 2A. An interface and power supply comes with most kits though.
Conclusion: I HAVE NONE... this is NOT a review for I have not seen the product though the brochure I have seen and it is very impressive. I think the concept I best about the kits is that you must build all the experiments, rather than having them already built for you. While doing this, you learn the fundamentals of robotics!! AND GUESS WHAT!!!: Fischer America Inc. is located right here in the valley! (Modesto). So, if enough of the group members would like, I could send Fischer a copy of this newsletter and plead for a demo at one of our meetings. It would truely be a VERY imformative demo. I might also add that

all the software is written in GFA Basic so we can be sure that the software should be the best.
Mike Thomas interesting and informative demo!! advertising the Glendale Atari Show.. I thought I'd better make a new one after a few people complained about driving to LA and finding no show..*

Mike Thomas

FRESNO BBS NEWS
Hello again from the Fresno ST Users Group BBS. Recently, I have wondering how we can make the BBS a more preoccupation. I thought maybe we could get some kind of game going. For example: Mike King takes a snip-it of a song wih his ST-Replay and then he uploads it and the rest of us download it and play it back and try to figure out what song it is. Kind of like "Name that Ryhm." The winner gets a free club disk (on me). Well, it's just an idea. If YOU have any suggestions, feel free to leave a message to the SysOp.

Many changes have been taking place behind the scenes at the FSTUG

BBS also. All new club officers owning modems have been given access to SIG #5 so they can share programs that will be on the club disk. If YOU have ANY programs that you think are good enough to be on the club disk, please upload them so we can take a look at them. I will put any of your uploads on SIG #5 so that the new club disk officer (Mike Penner - 299-3334) can put them on the club disk if he feels thet are worthy of it.

Closing, I would like to congradulate myself on making a new opening message!! The old one had been there since last summer and it was still advertising the Glendale Atari Show.. I thought I'd better make a new one after a few people complained about driving to LA and finding no show..*

Mike Thomas

SPECTRUM
A
REVIEW
BY
Gerald Storvick

The Atari St has a color pallette of 512 colors. It always seemed to me that any really decent paint program for the ST should be capable of using all 512 colors, rather than only 4 or 16. Well, now it has been done! Spectrum 512, from Antic Publishing, does this and much more.   Spectrum 512, besides its impressive color pallette and many other features not discussed here due to space limitations, includes sophisticated features such as:

1. Quick and easy menu and color selection; A Right mouse-button click brings up the menu or color matrix, depending on wether the cursor was in the top or bottom half of the screen. Another click selects a menu choice or color and returns you to the picture, (which is still visible in the background while in the menu or color matrix mode).

2. A unique and simple color selection matrix sytem. Six hexagonal color grids contain all 512 colors geometrically arranged in varying shades and hues. Place the cursor on the color you wish and click

the right mouse button and you are returned to the picture with that color active. As if that isn't enough, you may also select from any previously drawn color in the picture, (in case you want to duplicate a previous color and aren't sure which one it was), or you may select colors from the pallette in the side margins.

3. Three different side margin pallettes to select colors from; floating, fixed, and custom pallettes which can be created, saved, and loaded as desired.

4. The top and bottom margins, as well as the cursor, are always highlighted in the current active color.

5. The Anti-Alias Function, which smooths the stairstep jagged edges in diagonal lines.

6. Blurrer, which blends adjacent colors.

7. Contrast, which heightens or darkens the edges of adjacent colors.

8. Edit Color, which allows you to adjust shades or hues of selected colors in a local area or the whole picture.

9. Block functions, which allow portions or whole pictures to be manipulated, shrunk or enlarged, independant of the existing picture. They can even be shrunk and fit on the same screen as a catalog of the pictures on a

whole disk.

10. Gradient fill, which allow fills to be custom graduated through the color spectrum, such as in sunsets, etc.

11. No Zag, which can be used with polylines, polygons, circles, and ellipses, and allows these shapes to be drawn with no stairstep jaggies. This allows even someone like me, with no drawing talent whatsoever, to draw smooth curves with little effort.

12. Magnify, which brings into view an enlarged 32 by 14 pixel window superinposed over the picture, which moves with your cursor movement and allows single pixel color editing.

13. The Pallette Editor, which lets you build or load the special pallettes in the side margins as you desire.

14. A well designed tutorial is included in the manual, which leads you progressively through the many facets of Spectrum 512, which allowed me to become familiar with the operation of the program in a very short time, especially considering the complexity of a program with all the features this one has.

15. The Load Picture function can load NEOCHROME pictures, DEGAS or DEGAS ELITE low-res pictures (normal or compressed), or IFF pictures (low-resolution or HAM), in addition to its own picture file format. Since programs like PICSWITCH7 can convert these and other (8-bit Atari and Macintosh) into standard NEO or DEGAS formats, virtually any computer picture can be converted and loaded into Spectrum 512 and enhanced using its many features.

Alright, so now you want to know what isn't so great about this program. Only two things were noticed by me (Admittedly an inept novice at any form of art).

For one, since Spectrum 512 uses 80% of the ST's processing capability (and nearly all of a 520 ST's memory) just to display a picture, forget about using numerous accessories or a large ramdisk along with this program, unless you have a memory upgrade or a 1040 ST. And you will notice a few seconds delay in upgrading the picture on some of the most complex functions (in some cases the display is temporarily shown in 16 color mode to speed up calculations). I feel, however, that a program like Spectrum 512 makes much better use of the ST's capabilities than Neochrome or Degas, (after all, why use only one or two percent of a computer to show a picture with 98% wasted, when the alternative is so much better).

Secondly, (and this is to be expected on any program as full-featured as this one), I found some of the more advanced function commands harder to remember, possibly because I haven't used them as often, (also possibly because of my incredibly non photographic memory).

This program impressed me as having been extremely well thought out and designed for the users ease of use. In my view it completely blows away any graphics advantage the Amiga had over the ST. Now, if we could just figure out how to get Stereo sound out of this thing.....

Jerry Storvik

MIKEY'S COLUMN
BY
MIKE KING

GAME REVIEW
DEFENDER OF THE
CROWN
PRICE: $ 49.95

This new game is defenately the best! It's a mixture of great graphics, great sound, and a great plot.   The year is 1150. The location is midieval Europe. If you recall from your history class, the Normans and the Saxons were dire enemies. When the game starts, you choose which of the four characters you wish to be; each character has different statistics. You're placed into the game as a Norman, and to win it, you must defeat all of other participants and take their land.   So the game starts! The main menu has the following options: Hold Joust, Seek Conquest, Buy Army, Restart Game, and Quit.

If you hold a joust, you get to choose your opponent. Depending on your ability and how well you perform, you can raise your income (How much money you recieve after each turn).   Sometimes other people will challenge you to a joust, and you choose what you want to bet on: Territory or Leadership.

If you hit Seek Conquest, you can can conquer other lands! You can fight other participants, and if your army is powerful enough you can take all their land, and maybe even their castle! The more land you get ahold of the higher your income is!

Buy Army lets you purchase equipment. You can get men, knights, and catapults. All of these are essential during battle. Overall, I am HIGHLY impressed with this game. One flaw, the only flaw, is the documentation. It could use some improving; BUT other than that, it's one of the best games I have ever played! If I had $50 I'd run out and grab it...

I will be demoing at the next meeting too, so that you'll have a chance to see it for yourselves.

Mike.......

LIBRARY NOTES

The group has created a book library for the use of our members. These books will be available to be checked out at the meetings or they can be picked up at the Software Review. You can only keep the books for a week at a time in order to gieve everyone a chance to see them. There is no charge for the use of the books, so be sure to check it out at the next meeting.

Mike Penner is the new Disk Librarian and will make arrangements to have the old club disks at the meetings for copying.

If you have any questions about the back copies of the Disk of the Month, call Mike at 299-3334.

NEXT MEETING

Thursday, Novermber 19
DUE TO THANKSGIVING

7:00 P.M.

Breuners Furniture
Corner of Ceder and Shaw
Upstairs conference room